

Title (en)

MODULATION OF HSP47 EXPRESSION

Title (de)

MODULATION DER HSP47-EXPRESION

Title (fr)

MODULATION DE L'EXPRESSION DE HSP47

Publication

EP 2509991 B1 20151111 (EN)

Application

EP 10836656 A 20101208

Priority

- US 28514909 P 20091209
- US 30741210 P 20100223
- US 37207210 P 20100809
- US 2010059578 W 20101208

Abstract (en)

[origin: WO2011072082A2] Provided herein are compositions, methods and kits for modulating expression of target genes, particularly heat shock protein 47 (hsp47). The compositions, methods and kits may include nucleic acid molecules (for example, short interfering nucleic acid (siNA), short interfering RNA (siRNA), double-stranded RNA (dsRNA), micro-RNA (miRNA) or short hairpin RNA (shRNA)) that modulate a gene encoding hsp47, for example, the gene encoding human hsp47. The composition and methods disclosed herein may also be used in treating conditions and disorders associated with hsp47 such as liver fibrosis, pulmonary fibrosis, peritoneal fibrosis and kidney fibrosis.

IPC 8 full level

C12N 15/113 (2010.01); **A61K 31/713** (2006.01); **C07H 21/00** (2006.01)

CPC (source: EP KR US)

A61K 31/7088 (2013.01 - KR); **A61K 31/713** (2013.01 - EP KR US); **A61P 1/00** (2017.12 - EP); **A61P 1/16** (2017.12 - EP);
A61P 1/18 (2017.12 - EP); **A61P 3/10** (2017.12 - EP); **A61P 7/00** (2017.12 - EP); **A61P 9/00** (2017.12 - EP); **A61P 9/10** (2017.12 - EP);
A61P 11/00 (2017.12 - EP); **A61P 13/12** (2017.12 - EP); **A61P 17/02** (2017.12 - EP); **A61P 27/02** (2017.12 - EP); **A61P 31/14** (2017.12 - EP);
A61P 35/00 (2017.12 - EP); **A61P 41/00** (2017.12 - EP); **A61P 43/00** (2017.12 - EP); **C07H 21/00** (2013.01 - KR);
C12N 15/113 (2013.01 - EP KR US); **C12N 2310/11** (2013.01 - EP KR US); **C12N 2310/14** (2013.01 - EP KR US);
C12N 2310/31 (2013.01 - US); **C12N 2310/315** (2013.01 - EP KR US); **C12N 2310/317** (2013.01 - EP KR US); **C12N 2310/32** (2013.01 - US);
C12N 2310/321 (2013.01 - EP KR US); **C12N 2310/33** (2013.01 - US); **C12N 2310/531** (2013.01 - EP KR US);
C12N 2320/30 (2013.01 - EP KR US)

C-Set (source: EP US)

C12N 2310/321 + **C12N 2310/3521**

Cited by

EP4035659A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2011072082 A2 20110616; WO 2011072082 A3 20110818; AU 2010328104 A1 20120712; AU 2010328104 B2 20141030;
CA 2781896 A1 20110616; CA 2781896 C 20210330; CN 102741410 A 20120107; CN 102741410 B 20161116; CN 106701757 A 20170524;
CN 106701757 B 20191101; CN 106701758 A 20170524; CN 106701758 B 20200207; DK 2509991 T3 20151221; EP 2509991 A2 20121017;
EP 2509991 A4 20130522; EP 2509991 B1 20151111; EP 3012324 A2 20160427; EP 3012324 A3 20160706; EP 3434773 A2 20190130;
EP 3434773 A3 20190417; ES 2562499 T3 20160304; IL 219804 A0 20120731; IL 219804 A 20161031; IL 246770 B 20180628;
JP 2013514761 A 20130502; JP 2015109851 A 20150618; JP 2016127853 A 20160714; JP 5685267 B2 20150318; JP 5972408 B2 20160817;
JP 6197057 B2 20170913; KR 101692063 B1 20170103; KR 101718534 B1 20170322; KR 101900588 B1 20180919;
KR 20120120931 A 20121102; KR 20150140879 A 20151216; KR 20170003724 A 20170109; PL 2509991 T3 20160429;
PT 2509991 E 20160112; RU 2012122470 A 20140120; TW 201136594 A 20111101; TW 201509418 A 20150316; TW 201710502 A 20170316;
TW I465238 B 20141221; TW I543763 B 20160801; TW I611021 B 20180111; US 10093923 B2 20181009; US 2011178157 A1 20110721;
US 2014235695 A1 20140821; US 2016108399 A1 20160421; US 8710209 B2 20140429; US 9206424 B2 20151208

DOCDB simple family (application)

US 2010059578 W 20101208; AU 2010328104 A 20101208; CA 2781896 A 20101208; CN 201080060946 A 20101208;
CN 201610933223 A 20101208; CN 201610933224 A 20101208; DK 10836656 T 20101208; EP 10836656 A 20101208;
EP 15193839 A 20101208; EP 18191694 A 20101208; ES 10836656 T 20101208; IL 21980412 A 20120515; IL 24677016 A 20160713;
JP 2012543268 A 20101208; JP 2015006421 A 20150116; JP 2016020615 A 20160205; KR 20127017729 A 20101208;
KR 20157034827 A 20101208; KR 20167036618 A 20101208; PL 10836656 T 20101208; PT 10836656 T 20101208;
RU 2012122470 A 20101208; TW 103139983 A 20101208; TW 105114241 A 20101208; TW 99142975 A 20101208;
US 201414218422 A 20140318; US 201514924284 A 20151027; US 96360010 A 20101208